

CLAIMS

1. A new fibrinogen binding protein derived from Staphylococci having a molecular weight of 60 kDa.

5 2. Hybrid-DNA-molecule comprising a nucleotide sequence from *S. aureus* coding for a protein or polypeptide having fibrinogen binding activity.

10 3. Plasmid or phage comprising a nucleotide sequence from *S. aureus* coding for a protein or polypeptide having fibrinogen binding activity.

15 4. An *E. coli* strain expressing said fibrinogen binding protein.

15 5. A microorganism transformed by recombinant DNA molecule of claim 2.

20 6. Hybrid-DNA-molecule according to claim 2, comprising the following nucleotide sequence:
GAGCGAAGGA TACGGTCCAA GAGAAAAGAA ACCAGTGAGT ATTAATCACA
ATATCGTAGA GTACAATGAT GGTACTTTA AATATCAATC TAGACCAAAA
TTTAACTCAA CACCTAAATA TATTAAATTG AAACATGACT ATAATATTAA
AGAATTAAAC GATGGTACAT TCGAATATGG TGACGTCCA CAATTTAATA
AACCAGCAGC GAAAAGTGAT GCAACTATTA AAAAAGAACAA AAAATTGATT
CAAGCTCAAAT ATCTTGTGAG AGAATTGAA AAAACACATA CTGTCAGTGC
25 ACACAGAAAA GCACAAAAGG CAGTCAACTT AGTTTCGTTT GAATACAAAG
TGAACAAAAT GGTCTTACAA GAGCGAATTG ATAATGTATT AAAACAAGGA
TTAGTGAGA

30 7. A method for producing a fibrinogen binding protein or polypeptide wherein a) at least one hybrid-DNA molecule according to claim 2, is introduced into a microorganism, b) said microorganism is cultivated in a growth promoting medium, and c) the protein thus formed is isolated.

35 8. A fibrinogen binding protein or polypeptide comprising at least one amino acid sequence
SEGYGPREKK PVSINHNIVE YNDGTFKYQS RPKFNSTPKY IKFKHDYNIL
EFNDGTFEYG ARPQFNKPAA KTDATIKKEQ KLIQAQNLVR EFEKTHTVSA
40 HRKAQKAVNL VSFEYKVKKM VLQERIDNVL KQGLVR

SPM

9. Pharmaceutical composition for the inhibition of Staphylococci binding to fibrinogen comprising a fibrinogen binding protein of claim 1 in combination with a pharmaceutically acceptable carrier.

5 10. Method for inhibition of Staphylococci binding to fibrinogen in mammals including humans, by administering a therapeutically and/or prophylactically effective amount of a fibrinogen binding protein of claim 1 to a mammal in need of such treatment.

10 11. Method for passive immunization against Staphylococcal infection, comprising administering to a mammal antibodies against a fibrinogen binding protein of claim 1 in an amount sufficient to provide passive immunization.

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*Add
P2*